



1
SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Rubin, S.A.

Yednock, Ted A.

Carbone, Katherine M.

(ii) TITLE OF INVENTION: Treatment of Viral Encephalitis by
Agents Blocking Alpha-4 Integrin Function

(iii) NUMBER OF SEQUENCES: 5

(iv) CORRESPONDENCE ADDRESS:

- (A) ADDRESSEE: Townsend and Townsend and Crew LLP
- (B) STREET: Two Embarcadero Center, Eighth Floor
- (C) CITY: San Francisco
- (D) STATE: California
- (E) COUNTRY: USA
- (F) ZIP: 94111-3834

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:

- (A) APPLICATION NUMBER: US 09/010,377
- (B) FILING DATE: 21-JAN-1998
- (C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

- (A) NAME: Liebeschuetz, Joe
- (B) REGISTRATION NUMBER: 37,505
- (C) REFERENCE/DOCKET NUMBER: 015270-004300US

(ix) TELECOMMUNICATION INFORMATION:

- (A) TELEPHONE: (415) 576-0200
- (B) TELEFAX: (415) 576-0300

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Thr Ser Gln Asp Ile Asn Lys Tyr
20 25 30

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Met Ala Trp Tyr Gln Gln Thr Pro Gly Lys Ala Pro Arg Leu Leu Ile
 35 40 45

His Tyr Thr Ser Ala Leu Gln Pro Gly Ile Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Arg Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Asn Leu Trp Thr
 85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Asn Ile Lys Asp Thr
 20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Ala Asn Gly Tyr Thr Lys Tyr Asp Pro Lys Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Glu Gly Tyr Tyr Gly Asn Tyr Gly Val Tyr Ala Met Asp Tyr
 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

30

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1..6
- (D) OTHER INFORMATION: /product= "OTHER"
 $\text{/note= "Xaa at positions 1-6 may be present or absent, with the proviso that the entire peptide is not more than 11 amino acids"}$

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /product= "OTHER"
 $\text{/note= "Xaa = Tyr or Phe"}$

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 8
- (D) OTHER INFORMATION: /product= "OTHER"
 $\text{/note= "Xaa = Gly or Glu"}$

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10..15
- (D) OTHER INFORMATION: /product= "OTHER"
 $\text{/note= "Xaa at positions 10-15 may be present or absent, with the proviso that the entire peptide is not more than 11 amino acids"}$

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Xaa											
1	5					10					15

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 1..6
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa at positions 1-6 may be
present or absent, with the proviso that
the entire peptide is not more than 11
amino acids"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 7
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa = Tyr or Phe"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 8
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa = Gly or Glu"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 10..15
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa at positions 10-15 may be
present or absent, with the proviso that
the entire peptide is not more than 11
amino acids"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 16..21
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa at positions 16-21 may be
present or absent, with the proviso that
the entire peptide is not more than 11
amino acids"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 22
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa = Tyr or Phe"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 23
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa = Gly or Glu"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 25..30
(D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa at positions 25-30 may be
present or absent, with the proviso that
the entire peptide is not more than 11
amino acids"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Xaa
1 5 10 15

Xaa
20 25 30

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1..7
- (D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa at positions 1-7 may be present or absent, with the proviso that the entire peptide is not more than 9 amino acids"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 12..18
- (D) OTHER INFORMATION: /product= "OTHER"
/note= "Xaa at positions 12-18 may be present or absent, with the proviso that the entire peptide is not more than 9 amino acids"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Val Ser Phe Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa